

x360ce Libraries Tutorial

by ResoluteSpider5. V4 October2013.

<http://ngemu.com/threads/what-is-x360ce-and-how-to-use-it.154965/> contains additional information.

x360ce App Tutorial at <http://ngemu.com/threads/tutorial-by-resolutespider5.155011/>

Various x360ce guides at <http://ngemu.com/threads/various-x360ce-guides-by-resolutespider5.156807/>

x360ce (XBOX 360 Controller Emulator) is an emulator that allows DirectInput-only controllers (i.e. many gamepads, joysticks, steering wheels, etc.) to be used with XInput-only games and applications. I earlier wrote an x360ce App Tutorial. I suggest you read it before reading this.

In summary, the x360ce App download contains x360ce.exe (x360ce App). The App creates an xinput1_3.dll (x360ce Library), if it is not already present in the folder. The App also creates (if not already present in the folder), and edits, an x360ce.ini (x360ce Configuration file). The Configuration file contains settings for the Library. The App is not needed for x360ce emulation, but the Library and Configuration files are.

On the x360ce download page (<http://code.google.com/p/x360ce/downloads/list>), as well as the current App download (x360ce.App-x.x.x.xxx.zip), there are also library downloads:

- x360ce_lib32_rxxx.zip (or x360ce_libraries_rxxx_x86.zip). This is the current 32-bit x360ce Library download. **IT IS THE CORRECT FILE FOR ALMOST EVERYONE.** The reason for this is that, even if you are on 64-bit Windows, almost all games run 32-bit binaries regardless.
- x360ce_lib64_rxxx.zip (or x360ce_libraries_rxxx_x64.zip). This is the current 64-bit x360ce Library download. **ALMOST NO GAMES CAN USE THIS FILE**, just rare games that include 64-bit binaries for Windows 64-bit. I have written a tutorial for 64-bit x360ce Libraries at <http://ngemu.com/threads/various-x360ce-guides-by-resolutespider5.156807/#post-2119667>

Note there may be VS2010 builds of Library downloads available. Use these if you have problems with the other Library downloads; this sometimes happens with "Dark Souls". They are built with Visual Studio 2010, rather than Visual Studio 2012.

The main advantage of using the Library download, instead of the App download, is that included xinput1_3.dll (x360ce Library) is normally more up to date, so compatibility with games and systems should be superior. The main disadvantage of using the Library download is that setup can be more complicated.

If you want to use them, do the following. The first thing to do is to download the current version of x360ce_lib32_rxxx.zip. After you unzip, you should find something like the following files. I will also say the simplest way they could be used.

- **xinput1_3.dll: x360ce Library**, responsible for x360ce emulation. Put this in the game's executable folder (except for games using Valve's Source engine, see my App Tutorial for details). It is also described as an API wrapper, as it "wraps around" the system DInput. With some games it needs to be renamed to xinput1_2.dll, xinput1_1.dll or xinput9_1_0.dll, see later on for details. Do not confuse it with the system file of the same name, which is very different.
- x360ce.sample.ini: this file is not required. It is a sample file for **x360ce Configuration file (x360ce.ini)**, which contains settings for xinput1_3.dll, which can be both controller and game

specific. **HOWEVER x360ce.ini IS REQUIRED**, and it is simplest to put this in the same folder as xinput1_3.dll.

- **x360ce.gdb: x360ce Game Database.** It is simplest to put this in the same folder as xinput1_3.dll. If the file is present, and your game is listed in it, the HookMask needed for that game should be automatic. It masks the HookMask of x360ce.ini.
- **dinput8.dll: x360ce Loader.** Put this in the same folder as xinput1_3.dll, but only if needed. It is a simple loader, which loads xinput1_3.dll for games that need HookLL enabled, like "The Baconing". So it is needed by very few games. It also sometimes helps with "Dark Souls". Do not confuse it with the system file of the same name, which is very different.
- **LICENSE.txt, LGPL.txt, ReadMe.rtf:** these files are usually not needed.

As described above, you can put your x360ce.ini and x360ce.gdb files in the same folder as xinput1_3.dll. But you can also place them in the following locations. With Windows XP, you can put them in the "%allusersprofile%\Application Data\x360ce" folder, which is often "C:\Documents and Settings\All Users\Application Data\x360ce". With Windows Vista/7/8 you can put them in the "%allusersprofile%\x360ce" folder, which is often "C:\ProgramData\x360ce". The advantage of doing this is you can have the same x360ce.gdb and x360ce.ini file for all your games, and to change these files means that you change the settings for all of your games.

Well that's about it! The only complication really is the creation of the x360ce.ini file. The library download only contains x360ce.sample.ini. Advanced users can edit this file to create their own x360ce.ini. But unfortunately this is not very easy, unless you understand the settings well.

An easier way is to use the App, x360ce.exe. As explained earlier, x360ce.exe creates an xinput1_3.dll (which we don't want in this instance) but it also creates and edits an x360ce.ini (which we do want). So one way to set up x360ce is to do the following. Please note that there is a multitude of different ways of doing this...

1. Check [What is x360ce and how to use it](#) for requirements. Also my [x360ce App Tutorial](#) might help.
2. Download the latest versions of the App download (x360ce.App-x.x.x.xxx.zip) and 32-bit Library download (x360ce_lib32_rxxx.zip). Unzip them both.
3. Firstly, get the files from the Library download. Put the xinput1_3.dll (x360ce Library file) in the game's executable folder (except for games using Valve's Source engine, see my App Tutorial). Put x360ce.gbd, and dinput8.dll (only if needed), in the same folder.
4. Get x360ce.exe from the App download. Put it in the same folder as you have just put the xinput1_3.dll file.
5. Open x360ce.exe, and create and edit x360ce.ini as described in my App Tutorial. The only difference this time is that x360ce.exe will not create an xinput1_3.dll (Library), as there is already one present in the folder. Note: x360ce.exe only works with a 32-bit Library. If you want to use a 64-bit Library, first create x360ce.ini using a 32-bit Library.
6. If the x360ce.ini version does not match the xinput1_3.dll version, it may display the error message: "Configuration file version does not match x360ce version". You can suppress this by adding Version=1 to the [Options] section of x360.ini, see below.

```
[Options]
Version=1
```

7. With certain games, xinput1_3.dll needs to be renamed to xinput1_2.dll, xinput1_1.dll or

xinput9_1_0.dll. See the Game Compatibility List for details. Rename it manually, or use the App. In the App, go to Options > Installed Files, and tick the boxes needed. This will clone the present Library file, rather than the Library file generated by the App.

8. Close x360ce.exe, saving any settings. Before running your game, ensure your gamepad is plugged in. Gamepads may need to be enabled in your game too.

A note about InputHook: HookMode (before R572) and HookMask (R572 and later).

Before Library R572, x360ce used HookMode. Basically in the [InputHook] section there would be a HookMode=x entry, with the value of x determining if input hooking was Disabled, Normal, Compatibility, or Full.

With Library R572 and later, HookMode is ignored. HookMask is used instead. Either in the [InputHook] section there would be the hooks (HookLL, HookCOM, HookSA, HookWT, HookDI, HookPIDVID, HookName, etc.) set to 0 or 1, e.g HookCOM=1. Or else there would be a HookMask=0xHHHHHHHH entry, where H is a hexadecimal digit.

The main thing to remember is that (with Libraries R578 later) if you use the x360ce.gdb (x360ce Game Database), and your games are included in it, there is no longer any need to edit the [InputHook] section of x360ce.ini.

For more information see <http://ngemu.com/threads/report-game-compatibility-here.155113/> or <http://ngemu.com/threads/tutorial-by-resolutespider5.155011/>

Thanks to x360ce team for all the people you've helped: tapcio/tapeq, ejocys, Squall-Leonh@rt, etc.
